

**ABSTRACT**

The present invention relates to a device for detecting intake air amount variations among cylinders of a multiple-cylinder internal combustion engine, and makes it possible to accurately detect the intake air amount variations among the cylinders. The fuel injection amount is either increased or decreased from the injection amount for stoichiometric operation to determine the amount of a resulting change in the torque or rotation speed. The determined amount of the torque or rotation speed change is then output as an index value that indicates the degree of intake air amount variations among the cylinders.